

GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 3, 2002, 23:27:20 ; Search time 45.2264 Seconds
(without alignments)
1084.239 Million cell updates/sec

Title: US-09-805-550-4
Perfect score: 1910
Sequence: 1 MLTLVYKTKGTFEIRVQPN.....CORNEPLANYLLEHAGEED 368

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	1910	100.0	368	21	AAV71459
2	1169.5	61.2	371	21	AAI17377
3	1115	58.4	368	21	AAI44341
4	1067.5	55.9	348	21	AAI17378
5	1014	53.1	345	21	AAI44342
6	931.5	48.8	378	21	AAI19974
7	931.5	48.8	378	21	AAI45204
8	900.5	47.1	405	21	AAV71458
9	871.5	45.6	289	21	AAI17379
10	834	43.7	335	21	AAI19975

11	834	43.7	335	21	AAI45205	Arabidopsis thalia
12	820	42.9	286	21	AAI44343	Arabidopsis thalia
13	742	38.8	307	21	AAI19976	Arabidopsis thalia
14	742	38.8	307	21	AAI45206	Arabidopsis thalia
15	634	33.2	416	23	ABBS7171	Mouse ischaemic co
16	622.5	32.6	409	19	AAV75700	Vpr protein bindin
17	622.5	32.6	409	19	AAV68186	Vpr protein bindin
18	604	31.6	117	23	ABP34618	Human ORF3591 prot
19	603.5	31.6	363	18	AAV23658	E6AP-binding prote
20	603.5	31.6	363	19	AAV75699	Vpr protein bindin
21	603.5	31.6	363	19	AAV68185	Vpr binding protei
22	603	31.6	379	21	AAV58841	Breast and ovarian
23	574.5	30.1	346	18	AAV21730	Nuclear mitotic ap
24	563.5	29.5	257	21	AAI36529	Arabidopsis thalia
25	487.5	25.5	414	22	ABBS8584	Drosophila melanog
26	466	24.4	214	21	AAI36530	Arabidopsis thalia
27	375	19.6	290	22	ABBS72011	Drosophila melanog
28	374	19.6	186	21	AAI36531	Arabidopsis thalia
29	356	18.6	179	19	AAV75843	Arabidopsis thalia
30	356	18.6	179	19	AAV68187	Vpr protein bindin
31	333	17.4	174	19	AAV75850	Protein sequence o
32	333	17.4	174	19	AAV68194	Protein sequence o
33	308.5	16.2	136	21	AAI33942	Arabidopsis thalia
34	292.5	15.3	150	19	AAV75849	Protein sequence o
35	292.5	15.3	150	19	AAV68193	Protein sequence o
36	217	11.4	112	19	AAV75848	Protein sequence o
37	217	11.4	112	19	AAV68192	Protein sequence o
38	195.5	10.2	536	21	AAI30040	Arabidopsis thalia
39	195.5	10.2	577	21	AAI30039	Arabidopsis thalia
40	182	9.5	79	20	AAV87979	Ubiquitin-like dom
41	177	9.3	589	22	AAI94311	Human protein sequ
42	176	9.2	464	21	AAI12447	Human 1492H#151 u
43	176	9.2	589	22	AAI62194	Human SAP2 amino a
44	176	9.2	589	22	AAI74670	Human protease and
45	176	9.2	604	22	ABG16557	Novel human diagno

ALIGNMENTS

RESULT 1
ID AAV71459 standard; Protein: 368 AA.
AC AAV71459;
XX
XX 04-OCT-2000 (first entry)
DE Maize Rad23 protein #2.
KW Rad23; maize; ATCC No: PTA-531; recombinant expression cassette; wheat;
KW transgenic plant; soybean; sunflower; sorghum; canola; modulator.
XX
XX Zea mays.
OS
XX
XX WO200031268-A1.
XX
XX 02-JUN-2000.
XX
XX 12-OCT-1999; 99WO-US24129.
XX
XX 23-NOV-1998; 98US-0109728.
XX
XX (PION-) PIONEER HI-BRED INT INC.
XX
XX Mahajan PB, Tagliani L;
XX WPI; 2000-400078/34.
XX N-PSDB; AAD01231.
XX
XX Isolated nucleic acid encoding maize RAD23 protein is used to modulate
PT the levels of polypeptides in plant or in assays for identifying
PT compounds that bind to and/or increase/decrease enzymatic activity of

PT catalytically active polypeptides -
 XX Claim 11b; Page 78-79; 82pp; English.
 CC The present sequence is the maize Rad23 protein #2. It is isolated from
 CC a Zea mays cell line, B73 callus tissue regenerated five days after
 CC transfer of the callus from medium containing auxin to a medium devoid
 CC of exogenous auxin. The cDNA is deposited under the ATCC No: PTA-531.
 CC Maize Rad23 DNA sequence operably linked to a promoter, can be used to
 CC construct a recombinant expression cassette. This expression cassette
 CC can be used to generate a dicot or monocot transgenic plant e.g., maize,
 CC soybean, sunflower, sorghum, canola, wheat, etc.. It can also be used to
 CC modulate the levels of Rad23 polypeptide expression in a plant or in
 CC assays to identify compounds, that bind to and/or modulate the enzymatic
 CC activity of catalytically active polypeptides.
 XX
 SQ Sequence 368 AA:
 Query Match 100.0%; Score 1910; DB 21; Length 368;
 Best Local Similarity 100.0%; Pred. No. 7.6e-147;
 Matches 368; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 1 MLTYVTLKGTFFETVQNDTIMAVKKNIEIIOGKDSYPMGQQLIFNGKYLKDESTLE 60
 QY 61 ENKVNEDGFLVYVMSKGTSGTSSQHSNTPATROAPPLPAPQAPQAPVAPITTSQ 120
 DB 61 ENKVNEDGFLVYVMSKGTSGTSSQHSNTPATROAPPLPAPQAPQAPVAPITTSQ 120
 QY 121 PEGLPQAOANTNDNASNLISGRNDITINQLEMGGSGMDKQORALRAAYNNPERAV 180
 DB 121 PEGLPQAOANTNDNASNLISGRNDITINQLEMGGSGMDKQORALRAAYNNPERAV 180
 QY 181 EYLYSGIPYTAIEAVPISGOGANTTDRAPTGAGLSGINTPRLDIFPGASNAGGAGG 240
 DB 181 EYLYSGIPYTAIEAVPISGOGANTTDRAPTGAGLSGINTPRLDIFPGASNAGGAGG 240
 QY 241 GFLDELRRNPQFOAVREWHVNPQILQPLVLSKONPQILRIEHNDEFLQLNEPPE 300
 DB 241 GFLDELRRNPQFOAVREWHVNPQILQPLVLSKONPQILRIEHNDEFLQLNEPPE 300
 QY 301 GGESEDFLOPEDEEMPHASVTEPEQEAIGRLSEKGFDAKRYTEFLACDRNEELANYL 360
 DB 301 GGESEDFLOPEDEEMPHASVTEPEQEAIGRLSEKGFDAKRYTEFLACDRNEELANYL 360
 QY 361 LEHAGEED 368
 DB 361 LEHAGEED 368
 RESULT 2
 AAG17377
 ID AAG17377 standard; Protein; 371 AA.
 AC AAG17377;
 XX 17-OCT-2000 (first entry)
 DE Arabidopsis thaliana protein fragment SEQ ID NO: 18372.
 XX
 KW Protein identification; signal transduction pathway; metabolic pathway;
 KW hybridisation assay; genetic mapping; gene expression control; promoter;
 KW termination sequence.
 XX Arabidopsis thaliana.
 OS
 PN EP1033405-A2.
 XX 06-SEP-2000.
 PD
 XX 25-FEB-2000; 2000EP-0301439.
 PF
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PR 25-FEB-1999; 99US-0121825.
 PR 05-MAR-1999; 99US-0123180.
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Query Match 61.28; Score 1169.5; DB 21; Length 371;
 Best Local Similarity 64.38; Pred. No. 1.1e-86;
 Matches 247; Conservative 43; Mismatches 65; Indels 29; Gaps 9;

QY 1 MKLIVKTLKGFHFEIRVQNDTIMAVKKNIEIGKDSYPMGQOLLFNGKVLKDESTLE 60
 DB 1 MKLIVKTLKGSFHEIRVLPDPTIMAVKKNIEDSGKDNYPGQOLLHNGKVLKDESTLV 60
 QY 61 ENKYNEDGFLVLMKSKGTSGTSSQSHN-----TPATROAPPLRAPQOAPPP 112
 DB 61 ENKYTEEGFLVLMKSKSGSAGQASVQTSVQPSATTSSTKRPAP--STQSSSPV 118
 QY 113 VAPITTSQEGPLPAQAPTHTHNAASNLISGRNVDITINQLEMKGSGSKDKVORALRA 172
 DB 119 ASPIPAEQQ---PAQQDTYQAASTLVSGSSLEOMVOQIEMEGGSGDKETVTRALRA 175
 QY 173 YNPERAVEYLXSGIPYAEIAVP-----IGGOGANTTDRAPTGEBAGISGIPNTAPIDL 227
 DB 176 YNPERAVDYLXSGIPYAEIAVPPEQAQAGSGA-----APVAP--SGGPNSSPDLF 228
 QY 228 POGASNAGGAGGGLDFLRNNPFOAVRENVHTNPQIQPLVELSKONPQILRLTEEN 287
 DB 229 PQETVAAAGSGDLGTLERLRNNDPQQLRMVWHSNPQLQPMLEIGKQNLRLQEN 288
 QY 288 HDEFQLQINEPPEG--GGGDFLDQPEDEMPHAISVPEDEDAIGRESMGDFRARIYA 345
 DB 289 QAELTQLVNEPEYEGSDGDFDQPEQ-EMPHAINVPAEQEAIRLEAMGFDRALVYA 347
 QY 346 FLACDRNEELANYLLEHAGE-ED 368
 DB 348 FLACDRNEELANYLLENSGDFED 371

RESULT 3
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 ID AAG44341 standard; Protein; 368 AA.
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 AC AAG44341;

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PR 28-OCT-1999; 99US-0161993.
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Query Match 58.4%; Score 1115; DB 21; Length 368;
Best Local Similarity 62.8%; Pred. No. 2.9e-62;
Matches 235; Conservative 45; Mismatches 82; Indels 12; Gaps 8;

QY 1 MKLTVKTLKSTGHEIRVQPDITMAVKNIEIQKDSYPMGQOOLLFNGKVLKDEESTLE 60
DB 1 MKLTVKTLKSHFEIRVLPDITMAVKNIEDSKNRYPCGOOLLHNGKVLKDEETIY 60
QY 61 ENKYNEDGFLVMSKSKTIGSTGTSSQ-HSNTPATROAPLEAPQADPPVAPITTS 119
DB 61 ENKVTBEGFLVMSKSKTIGSTGTSSQ-HSNTPATROAPLEAPQADPPVAPITTS 119
QY 120 QP-EGLPAPQPNTHDNASNLSCRNVDITIIINOLMEMGGSGWDKYOALRAAYNNPER 178
DB 120 TPVQOEPPTASDITYGCAASTLVSSSTEQWQOITMEMGGSGWDKETYTRALRAAYNNPER 179
QY 179 AVEVLXSGIPIVTAET-AVPIGGGAGANTTDRAPTGEAGISGIPNTAPILDFPOGASNAGCG 237
DB 180 AVDYLVSGIPIVTAETIPATNLSGVSGRELTAAPP---SGGPNSSPLDLPQAEVSDAAG 235
QY 238 AGGGPLDPLFNKNPFOFAVREKWHITNPQIILQPMVELSKNPQIILRIENHDEFLQLINE 297

DB 236 GDLGTLEFLKRGNDQFOQLRSMVNSNPQILOPMLOELKONPOLRLIQENQAEFLQLINE 295
QY 298 PFECEGEG--DFLDQPEEDENPHATSVTPERBEATGRLESNGFDRARYTEAFIACDRNEEL 355
DB 296 PYESGDGVDILFDQPDQ-EMPHSVNTPEQESIERLEAMGFDAIYIEAFIACDRNEEL 354
QY 356 AANYLLEHAGE-ED 368
DB 355 AANYLLEHAGE-ED 368
RESULT 4
AAG17378
ID AAG17378 standard; Protein; 348 AA.
XX
AC AAG17378;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 18373.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-0301439.
XX
PR 25-FEB-1999; 99US-0121825.
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PR 09-MAR-1999; 99US-0123548.
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PR 25-MAR-1999; 99US-0126264.
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PR 25-MAY-1999; 99US-0136021.
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PR 30-JUN-1999; 99US-0141287.
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PR 16-AUG-1999; 99US-0149368.
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PR 20-AUG-1999; 99US-0149723.
PR 20-AUG-1999; 99US-0149929.
PR 23-AUG-1999; 99US-0149902.
PR 23-AUG-1999; 99US-0149930.
PR 25-AUG-1999; 99US-0150566.
PR 26-AUG-1999; 99US-0150884.
PR 27-AUG-1999; 99US-0151065.
PR 27-AUG-1999; 99US-0151066.
PR 27-AUG-1999; 99US-0151080.
PR 30-AUG-1999; 99US-0151303.
PR 31-AUG-1999; 99US-0151438.
PR 01-SEP-1999; 99US-0151930.
PR 07-SEP-1999; 99US-0152363.
PR 10-SEP-1999; 99US-0153070.
PR 13-SEP-1999; 99US-0153758.
PR 15-SEP-1999; 99US-0154018.
PR 16-SEP-1999; 99US-0154039.
PR 20-SEP-1999; 99US-0154779.
PR 22-SEP-1999; 99US-0155139.
PR 23-SEP-1999; 99US-0155486.
PR 24-SEP-1999; 99US-0155659.
PR 28-SEP-1999; 99US-0156458.
PR 29-SEP-1999; 99US-0156596.
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PR 21-OCT-1999; 99US-0160741.
PR 21-OCT-1999; 99US-0160767.
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PR 21-OCT-1999; 99US-0160815.
PR 22-OCT-1999; 99US-0160980.
PR 22-OCT-1999; 99US-0160981.
PR 22-OCT-1999; 99US-0160989.
PR 22-OCT-1999; 99US-0161404.
PR 25-OCT-1999; 99US-0161405.
PR 25-OCT-1999; 99US-0161406.
PR 26-OCT-1999; 99US-0161359.
PR 26-OCT-1999; 99US-0161360.
PR 26-OCT-1999; 99US-0161361.
PR 28-OCT-1999; 99US-0161920.
PR 28-OCT-1999; 99US-0161992.
PR 28-OCT-1999; 99US-0161993.
PR 29-OCT-1999; 99US-0162142.

Query Match 55.9%; Score 1067.5; DB 21; Length 348;
Best Local Similarity 62.9%; Pred. No. 1.9e-78;
Matches 227; Conservative 41; Mismatches 64; Indels 29; Gaps 9;

OY	24	MAVKNIIEIQTGKSYPMQOOLLIFNGKYLKDESTLEENKYNEDGLVWMLSKGISGST	83
Db	1	MAVKNIINIEDSGKNYPGCOOLLIHNGKVYLKDEFTSIVENKYTEEGPLVMMLSKSGCSA	60
OY	84	GTSSSGSHN-----TPARAPRPLEAPQAQPAPVPAPTTSQBPBGLPAQAANTHDNA	135
Db	61	GAASQVSYSVSQPVSAITSSSTKPAA--STGOSSPVPASPPIPAEQ--PAAGTDIVGQA	115
OY	136	ASNLLGCHNVDTIIINQLMEMGGSMWDKYOALRAAYNNPERAVEEYLSGIPTAEIAV	195
Db	116	ASTLVSSGSLEDMVOQIMEMGGSMWDEKTYTRALRAAYNNPERAVDILYSGIPTAEYAV	175
OY	136	P-----IGGGAANTTDRAPTGEAGLISGITPNTAPDLPEPPQASNAGGAGGCPDLFLRNP	250
Db	176	PVPEAQIAGSGA-----APVAFA--SGGPNSPDLPFQETVFAAAGSGDLCITIEFLRND	228
OY	251	QFOAVREWHVNPPOLIPMLVELSKONPQILLRIEENHDFLOLLNEPFES--GEGPFLD	308
Db	229	QFOQLRTVNHSPNLIOPMLDELKQNPKQLRLTIQENQAEFLQIVNBEPYESDGEGMFD	288
OY	309	QPEEDEMHAIISVTPPEQEAIIGRLSEMGCFDRARYTEAFACDRNEELAAANYLPHAGE-E	367
Db	289	QPEQ-EMFHAINVTPAREDAIQRLAMGFDRALVIIEAFIACDRNEELAAANYLENSDPE	347
OY	368	D 368	
Db	348	D 348	
RESULT 5			
ID	AAG44342		
AD	AAG44342 standard; Protein: 345 AA.		
XX	AAG44342;		
AC			
XX			
XX	18-OCT-2000 (first entry)		
DT			
XX			
De	Arabidopsis thaliana protein fragment SEQ ID NO: 55532.		
XX			
KW	Protein identification; signal transduction pathway; metabolic pathway;		
KM	hybridisation assay; genetic mapping; gene expression control; promoter		
XX	termination sequence.		
OS	Arabidopsis thaliana.		
XX			
PN	EPI033405-A2.		
XX			
PD	06-SEP-2000.		
XX			
PF	25-FEB-2000; 2000EP-0301439.		
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PR	25-FEB-1999; 99US-0121825.		
PR	05-MAR-1999; 99US-0123180.		
PR	09-MAR-1999; 99US-0123548.		
PR	23-MAR-1999; 99US-0125788.		
PR	25-MAR-1999; 99US-0126264.		
PR	29-MAR-1999; 99US-0126785.		
PR	01-APR-1999; 99US-0127452.		
PR	06-APR-1999; 99US-0128234.		
PR	08-APR-1999; 99US-0128714.		
PR	16-APR-1999; 99US-0129845.		
PR	19-APR-1999; 99US-0130077.		
PR	21-APR-1999; 99US-0130449.		
PR	23-APR-1999; 99US-0130510.		
PR	23-APR-1999; 99US-0130891.		
PR	28-APR-1999; 99US-0131449.		
PR	30-APR-1999; 99US-0132048.		
PR	30-APR-1999; 99US-0132407.		
PR	04-MAY-1999; 99US-0132484.		
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 PR 27-JUL-1999; 99US-0145913.
 PR 27-JUL-1999; 99US-0145918.
 PR 27-JUL-1999; 99US-0145919.
 PR 28-JUL-1999; 99US-0145951.
 PR 02-AUG-1999; 99US-0146386.
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 PR 03-AUG-1999; 99US-0147038.
 PR 04-AUG-1999; 99US-0147204.
 PR 04-AUG-1999; 99US-0147302.
 PR 05-AUG-1999; 99US-0147192.
 PR 05-AUG-1999; 99US-0147260.
 PR 06-AUG-1999; 99US-0147303.
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 PR 09-AUG-1999; 99US-0147933.
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 PR 10-AUG-1999; 99US-0148171.
 PR 11-AUG-1999; 99US-0148319.
 PR 12-AUG-1999; 99US-0148341.
 PR 13-AUG-1999; 99US-0148565.
 PR 13-AUG-1999; 99US-0148684.
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 PR 17-AUG-1999; 99US-0149175.
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 PR 20-AUG-1999; 99US-0149723.
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 PR 31-AUG-1999; 99US-0151438.
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 PR 07-SEP-1999; 99US-0152363.
 PR 10-SEP-1999; 99US-0153070.
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 PR 06-OCT-1999; 99US-0157865.
 PR 07-OCT-1999; 99US-0158029.
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 PR 18-OCT-1999; 99US-0159638.
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 PR 21-OCT-1999; 99US-0160767.
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 PR 21-OCT-1999; 99US-0160770.
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PR 22-OCT-1999; 99US-0160981.
 PR 22-OCT-1999; 99US-0160989.
 PR 25-OCT-1999; 99US-0161404.
 PR 25-OCT-1999; 99US-0161405.
 PR 25-OCT-1999; 99US-0161406.
 PR 26-OCT-1999; 99US-0161359.
 PR 26-OCT-1999; 99US-0161360.
 PR 26-OCT-1999; 99US-0161361.
 PR 28-OCT-1999; 99US-0161920.
 PR 28-OCT-1999; 99US-0161992.
 PR 28-OCT-1999; 99US-0161993.
 PR 29-OCT-1999; 99US-0162142.

Query Match 53.1%; Score 1014; DB 21; Length 345;
 Best Local Similarity 61.3%; Pred. No. 4.2e-74;
 Matches 215; Conservative 44; Mismatches 80; Indels 12; Gaps 8;

QY 24 MAVKKNIIEIOGKDSYPMGOOLLINFGVYLKDESTLEENKVEDGFIVMISKGTSGST 83
 DB 1 MAVKKNIIEIOSKDNIPCGOOLLINFGVYLKDETLVENKVEEGFLVMMISKSTASSA 60
 QY 84 GTSSQ-HSNTPATROAPLEAPQAPPPVAPITTSOP-EGIPAPQANTHDNANSLIS 141
 DB 61 GPSSTQPTSTTSTISSTLIAP-STQSIAPVPAASNSTPVOQPTAOSDTYQAASTLVS 119
 QY 142 GRNVDTIINQLEMGGSGSDKDKVORALRAAYNPNPRAVEYLSGIPVTAET-AVPIGGQ 200
 DB 120 GSSIQMVQOIIEMGGSGSDKETVTRALRAAYNPNPRAVDYLSGIPVTPATNLSGV 179
 QY 201 GANTDRAPTGAGLSGIPNTAPLPLFPOGASNAGGAGCGPLDRNNPOQAVREAVH 260
 DB 180 GSGRELTAAPP---SGGNSSPLDLFPOEAVSDAGDGLTLELRKNDQFQQLRSWN 235
 QY 261 TNPQILQPMYELSKONPOLILIEHNDEFLQLINEFEGGEG--DFLDPPEDEMPHA 318
 DB 236 SNPQILQPMYELSKONPOLILIEHNDEFLQLINEFEGGSDGVDFDQDQ-EMHS 294
 QY 319 ISVPEBOPAIGRLSEMGDFDRARVTEAPLACDRNEELANVYLIEHAGE-ED 368
 DB 295 VNVTEEOESIERLEAMGDFRAIVTEAPLACDRNEELANVYLIEHAGE-ED 345

RESULT 6
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 ID AKG19974 standard; Protein: 378 AA.
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 AC AKG19974;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Arabidopsis thaliana protein fragment SEQ ID NO: 21981.
 XX
 KW Protein identification; signal transduction pathway; metabolic pathway;
 KW hybridisation assay; genetic mapping; gene expression control; promoter;
 KW termination sequence.
 XX
 OS Arabidopsis thaliana.
 OS
 XX
 PN EP1033405-A2.
 XX
 PD 06-SEP-2000.
 XX
 XX
 PF 25-FEB-2000; 2000EP-0301439.
 XX
 PR 25-FEB-1999; 99US-0121825.
 PR 05-MAR-1999; 99US-0123180.
 PR 09-MAR-1999; 99US-0123548.
 PR 23-MAR-1999; 99US-0125788.
 PR 25-MAR-1999; 99US-0126264.
 PR 29-MAR-1999; 99US-0126785.
 PR 01-APR-1999; 99US-0127462.
 PR 06-APR-1999; 99US-0128234.
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PR 16-APR-1999; 99US-0129845.
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 PR 08-OCT-1999; 99US-0158232.
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 PR 13-OCT-1999; 99US-0159295.

PR 30-JUN-1999; 99US-014187.
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PR 23-AUG-1999; 99US-0149930.
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PR 26-AUG-1999; 99US-0150884.
PR 27-AUG-1999; 99US-0151065.
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PR 27-AUG-1999; 99US-0151080.
PR 30-AUG-1999; 99US-0151303.
PR 31-AUG-1999; 99US-0151438.
PR 01-SEP-1999; 99US-0151930.
PR 07-SEP-1999; 99US-0152363.
PR 10-SEP-1999; 99US-0153070.
PR 13-SEP-1999; 99US-0153758.

PR 15-SEP-1999; 99US-0154018.
PR 16-SEP-1999; 99US-0154039.
PR 20-SEP-1999; 99US-0154779.
PR 22-SEP-1999; 99US-0155139.
PR 23-SEP-1999; 99US-0155486.
PR 24-SEP-1999; 99US-0155659.
PR 28-SEP-1999; 99US-0156458.
PR 29-SEP-1999; 99US-0156456.
PR 04-OCT-1999; 99US-0157117.
PR 05-OCT-1999; 99US-0157653.
PR 06-OCT-1999; 99US-0157665.
PR 07-OCT-1999; 99US-0158029.
PR 08-OCT-1999; 99US-0158232.
PR 12-OCT-1999; 99US-0158369.
PR 13-OCT-1999; 99US-0159293.
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PR 18-OCT-1999; 99US-0159584.
PR 21-OCT-1999; 99US-0160741.
PR 21-OCT-1999; 99US-0160767.
PR 21-OCT-1999; 99US-0160770.
PR 21-OCT-1999; 99US-0160768.
PR 21-OCT-1999; 99US-0160814.
PR 21-OCT-1999; 99US-0160815.
PR 22-OCT-1999; 99US-0160980.
PR 22-OCT-1999; 99US-0160981.
PR 22-OCT-1999; 99US-0160989.
PR 25-OCT-1999; 99US-0161404.
PR 25-OCT-1999; 99US-0161405.
PR 25-OCT-1999; 99US-0161406.
PR 26-OCT-1999; 99US-0161359.
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PR 26-OCT-1999; 99US-0161361.
PR 28-OCT-1999; 99US-0161920.
PR 28-OCT-1999; 99US-0161992.
PR 28-OCT-1999; 99US-0161993.
PR 29-OCT-1999; 99US-0162142.

Query Match 48.8%; Score 931.5; DB 21; Length 378;
Best Local Similarity 52.6%; Pred. No. 2,4e-67;
Matches 200; Conservative 56; Mismatches 109; Indels 15; Gaps 8;

QY 1 MKLTVKTLKTHFEIRQPNPTIYAVKKNIEIGCKDSYPMGQOLLIPNGVLRDESTLE 60
:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db 1 MKIFVKTLGSGNFEIEVAPADKVSIDVKTAIETVKGAE-YPAKQMLIHQCKVLKDEDTLE 59
QY 61 ENKNYDEGFVYMLSKGTS--GSTGSSQHSNTPATRQAPLEAP-QQAPQPVAPI 116
|||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db 60 ENNVVENSFIYIMLSKIKASPSGASTASAPSPATQPTVATTPVQSATVASVPPTSGTA 119
QY 117 TTSQPEGLPAQAPNTHDNAASNLISGRNVDTIINQIMMGSGSMDKQVORALRAAYNPP 176
:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db 120 TAAAPATRASVQTDVYGGAAASNLVAGTTFLESTVOQIIDMGSGSMDRDTIVRALRAEFNP 179
QY 177 ERAVEYLXSGIPVTAET-----AVPIGGGAGN--TTDRAPPGEGAGLSIPTAPLIDLPQ 229
|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db 180 ERAVEYLXSGIPVTAETIPVVAQAPATGEOANPLAQPOQAAAPAAATGCPNANPLNLPQ 239
QY 230 GASNAGGAGGCPPLDEKNNPQFOAVREMHVHTNPQIOLPMLVELSKONPOTIRLIEENHD 289
|:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db 240 GMPAADAGACAGNIDFLRNSQGFQALRAMVQANQIILPMLQELGKQNPQVRLIQEHOA 299
QY 290 EFLQLINEPEEGGDFLDQPEDEDEMPHAISVTPDEORALGRLSMGFDRARVLEAFIAC 349
:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db 300 DFLRLINEPVE-GEENVMEQLEA-AMPQAVVTPEERERAIERLRGSMGFDRAVMEVEFPAC 357
QY 350 DRNEELIANYLLERAGE-ED 368
:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||

DB 358 NKNELAANYLDHMHFFED 377

RESULT 8
AAV71458
ID AAV71458 standard; Protein; 405 AA.
XX AAV71458;
AC AAV71458;
XX
XX 04-OCT-2000 (first entry)
DT
XX
XX
DE Maize Rad23 protein #1.
XX
XX Rad23; maize; ATCC No: PTA-530; recombinant expression cassette; wheat;
KM transgenic plant; soybean; sunflower; sorghum; canola; modulator.
XX
XX Zea mays.
OS
XX WO200031268-A1.
PN
XX 02-JUN-2000.
PD
XX 12-OCT-1999; 99WO-US24129.
PF
XX 23-NOV-1998; 98US-0109728.
XX
XX (PION-) PIONEER HI-BRED INT INC.
PA
XX Mahajan PB, Tagliant L;
PI
XX WPI: 2000-400078/34.
DR N-PSDB: AAD01230.
XX
XX Isolated nucleic acid encoding maize RAD23 protein is used to modulate
PT the levels of polypeptides in plant or in assays for identifying
PT compounds that bind to and/or increase/decrease enzymatic activity of
PT catalytically active polypeptides -
XX
XX Claim 11b; Page 75-76; 82pp; English.
XX
XX The present sequence is the maize Rad23 protein #1. It is isolated from
CC V5 root tissue of a Zea mays cell line B73, infested with corn root
CC worm. The cDNA sequence is deposited under the ATCC No: PTA-530. Maize
CC Rad23 DNA sequence operably linked to a promoter can be used to construct
CC a recombinant expression cassette. This expression cassette can be used
CC to generate a dicot or monocot transgenic plant e.g., maize, soybean,
CC sunflower, sorghum, canola, wheat, etc.. It can also be used to modulate
CC the levels of Rad23 polypeptide expression in a plant or in assays to
CC identify compounds, that bind to and/or modulate the enzymatic activity
CC of catalytically active polypeptides.
XX
XX
SQ Sequence 405 AA;
Query Match 47.1%; Score 900.5; DB 21; Length 405;
Best Local Similarity 49.0%; Pred. No. 8.7e-65;
Matches 197; Conservative 53; Mismatches 117; Indels 35; Gaps 7;
QY 1 MKLTVTKLGFHEIRVQNDTMAVKNIEIOGKDYPMGQQLIFNGKYLKDESTLE 60
DB 1 MKLVNKTLLKGFHEIRVQNDTMAVKNIEIOGKDYPMGQQLIFNGKYLKDESTLE 60
QY 61 EKKVNEDEGLVYMLSKGTSGTSSQSHSTPATRQAP-----PLEAPQAP-QPPVA 114
DB 61 SNGVAVENSLFVYMLSKGTSGTSSQSHSTPATRQAP-----PLEAPQAP-QPPVA 119
QY 115 PITTSQPEGLPQAP-----NTHNMA SNLISGNVVTIINQLMEKGGSGMDKK 164
DB 120 TAEITAPPSYQPPAAPVATDADVYSQAASNLVFGNNLSQTLIQQLIDMGCGTWERDY 179
QY 165 VQALRAAYNNBERAVEYLYSGIPYTAE----IAVPIGGGANTDTRAPTGEA----- 213
DB 180 VYRAIRAAVNNBERAIDYLYSGIPENVEAQPARAPAGQGNQQAASPAQPAVALPVP 239

QY 214 -GLSGIPNTAPLDLPQGASNAGC-----GAGGGLDPLRNNPQAVREWHYTNPQL 266
DB 240 SPASAGPNANPLNLPQGVSGSGNPGVYVAGASGALDLALROLPPQALLQVQANPQL 299
QY 267 QPMLVELSKONPOLILRIENHDEFIOLLNPEPGESEDFLOPREDENPHASVTPPEQ 326
DB 300 QPMLQELGKONPOLILRIENHDEFIOLLNPEPGESEDFLOPREDENPHASVTPPEER 359
QY 327 EAIGRLSEMGFDRARYTEAFACDRNEELAANYLLEHAGEED 368
DB 360 EATQRLGEMGFNRELYLEVFPACNKRDELTANTYLDHGHFFD 401

RESULT 9
AAG17379
ID AAG17379 standard; Protein; 299 AA.
XX
XX AAG17379;
AC
XX
XX 17-OCT-2000 (first entry)
DT
XX
XX Arabidopsis thaliana protein fragment SEQ ID NO: 18374.
DE
XX
XX Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
XX Arabidopsis thaliana.
OS
XX
XX EP1033405-A2.
PN
XX
XX 06-SEP-2000.
PD
XX
XX 25-FEB-2000; 2000EP-0301439.
PF
XX
XX 25-FEB-1999; 99US-0121825.
PR 05-MAR-1999; 99US-0123180.
PR 09-MAR-1999; 99US-0123548.
PR 23-MAR-1999; 99US-0125788.
PR 25-MAR-1999; 99US-0126264.
PR 29-MAR-1999; 99US-0126785.
PR 01-APR-1999; 99US-0127462.
PR 06-APR-1999; 99US-0128234.
PR 08-APR-1999; 99US-0128714.
PR 16-APR-1999; 99US-0129845.
PR 19-APR-1999; 99US-0130077.
PR 21-APR-1999; 99US-0130449.
PR 23-APR-1999; 99US-0130510.
PR 23-APR-1999; 99US-0130891.
PR 28-APR-1999; 99US-0131449.
PR 30-APR-1999; 99US-0132048.
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PR 04-MAY-1999; 99US-0133284.
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PR 11-MAY-1999; 99US-0134256.
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PR 21-MAY-1999; 99US-0135353.
PR 24-MAY-1999; 99US-0135629.
PR 25-MAY-1999; 99US-0136021.
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PR 28-MAY-1999; 99US-0136782.
PR 01-JUN-1999; 99US-0137222.
PR 03-JUN-1999; 99US-0137528.
PR 04-JUN-1999; 99US-0137502.

PR 27-JUL-1999; 99US-0145913.
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 PR 27-JUL-1999; 99US-0145919.
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 PR 04-AUG-1999; 99US-0147038.
 PR 04-AUG-1999; 99US-0147204.
 PR 05-AUG-1999; 99US-0147302.
 PR 05-AUG-1999; 99US-0147192.
 PR 06-AUG-1999; 99US-0147260.
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 PR 10-AUG-1999; 99US-0147935.
 PR 11-AUG-1999; 99US-0148319.
 PR 12-AUG-1999; 99US-0148341.
 PR 13-AUG-1999; 99US-0148365.
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 PR 16-AUG-1999; 99US-0149368.
 PR 17-AUG-1999; 99US-0149175.
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 PR 20-AUG-1999; 99US-0149929.
 PR 23-AUG-1999; 99US-0149902.
 PR 23-AUG-1999; 99US-0149930.
 PR 25-AUG-1999; 99US-0150566.
 PR 25-AUG-1999; 99US-0150884.
 PR 27-AUG-1999; 99US-0151085.
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 PR 31-AUG-1999; 99US-0151348.
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 PR 07-SEP-1999; 99US-0152363.
 PR 10-SEP-1999; 99US-0153070.
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 PR 15-SEP-1999; 99US-0154018.
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 PR 24-SEP-1999; 99US-0155659.
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 PR 26-OCT-1999; 99US-0161361.
 PR 28-OCT-1999; 99US-0161920.
 PR 28-OCT-1999; 99US-0161992.
 PR 28-OCT-1999; 99US-0161993.
 PR 29-OCT-1999; 99US-0162142.

Query Match 43.7%; Score 834; DB 21; Length 335.
 Best Local Similarity 53.3%; Pred. No. 1.7e-58;
 Matches 179; Conservative 47; Mismatches 96; Indels 14; Gaps 7;

OY 45 LLIENGKVLKDESTLEENKVNEDGFLVYMLSKGKTS---GSGTSSSOHSNTPATROAP 101
 Db 1 MLIHGKVLKDEETLEENNVENSPIVIMLSKTRASPGCASTASAPASAIQPTVATPQ 60

OY 102 LEAP-QQAPPPVAPITTSQPEGLPAQAPNTHDNASMLSGRNYDTIINOLMEKGGSW 160
 Db 61 VSAPFASVPVPTSGTATAAPATAASVQTDVYQGAASMLVAGTTLSTVQQLDMKGGSW 120

OY 161 DKDKVQRLRAAYNNPERAVERIYSGIPVTAI-----AVPIGGOGAN--ITDRAPGEA 213
 Db 121 DRDTVRLRALRAAFNNPERAVERIYSGIPAOAIEPPVQAAPTGEQAANLAPQQAAPA 180

OY 214 GLSGIPNPAPLDLPQASNAGGAGGGLPDLRNNPQFOAVREVNHPNPOILQMLVEL 273
 Db 181 AATGPNANPPLNLPFGQAPADAGAGNLDPLRNSQOFQALRAVQANPQILOPMLQEL 240

OY 274 SKQNPQILRIEENHDEFQQLNEPFEGEGEDFDLDQPEDEMPHAISVTPPEQEAIGRL 333
 Db 241 GKQNPQILRIEENHDEFQQLNEPFEGEGEDFDLDQPEDEMPHAISVTPPEQEAIGRL 298

OY 334 SMGPDRAVITAEFLACDNRNEELAAVYLEHAGE-ED 368
 Db 299 GMGPDRAVITAEFLACDNRNEELAAVYLLDHMERED 334

RESULT 11
 AAG45205
 ID AAG45205 standard; Protein: 335 AA.
 XX AAG45205;
 AC
 XX 18-Oct-2000 (first entry)
 DT
 XX
 DE Arabidopsis thaliana protein fragment SEQ ID NO: 56724.
 XX
 KW Protein identification; signal transduction pathway; metabolic pathway;
 KW hybridisation assay; genetic mapping; gene expression control; promoter;
 XX termination sequence.
 OS Arabidopsis thaliana.
 PN EP1033405-A2.
 PD 06-SEP-2000.
 XX
 XX
 PF 25-FEB-2000; 2000EP-0301439.
 PR 25-FEB-1999; 99US-0121825.
 PR 05-MAR-1999; 99US-0123180.
 PR 09-MAR-1999; 99US-0123548.
 PR 23-MAR-1999; 99US-0125788.
 PR 25-MAR-1999; 99US-0126264.
 PR 29-MAR-1999; 99US-0126785.
 PR 01-APR-1999; 99US-0127462.
 PR 06-APR-1999; 99US-0128234.
 PR 08-APR-1999; 99US-0128714.
 PR 16-APR-1999; 99US-0129845.
 PR 19-APR-1999; 99US-0130077.
 PR 21-APR-1999; 99US-0130449.

PR 23-APR-1999; 99US-0130510.
PR 23-APR-1999; 99US-0130891.
PR 28-APR-1999; 99US-0131449.
PR 30-APR-1999; 99US-0132048.
PR 30-APR-1999; 99US-0132407.
PR 04-MAY-1999; 99US-0133248.
PR 05-MAY-1999; 99US-0133248.
PR 06-MAY-1999; 99US-0132486.
PR 06-MAY-1999; 99US-0132487.
PR 07-MAY-1999; 99US-0132863.
PR 11-MAY-1999; 99US-0134256.
PR 14-MAY-1999; 99US-0134218.
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PR 14-MAY-1999; 99US-0134370.
PR 18-MAY-1999; 99US-0134768.
PR 19-MAY-1999; 99US-0134941.
PR 20-MAY-1999; 99US-0135124.
PR 21-MAY-1999; 99US-0135353.
PR 24-MAY-1999; 99US-0135629.
PR 25-MAY-1999; 99US-0136021.
PR 27-MAY-1999; 99US-0136392.
PR 28-MAY-1999; 99US-0136782.
PR 01-JUN-1999; 99US-0137222.
PR 03-JUN-1999; 99US-0137528.
PR 04-JUN-1999; 99US-0137502.
PR 07-JUN-1999; 99US-0137724.
PR 08-JUN-1999; 99US-0138094.
PR 10-JUN-1999; 99US-0138540.
PR 14-JUN-1999; 99US-0138847.
PR 16-JUN-1999; 99US-0139119.
PR 16-JUN-1999; 99US-0139452.
PR 16-JUN-1999; 99US-0139453.
PR 17-JUN-1999; 99US-0139492.
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PR 29-OCT-1999; 99US-0162142.

Query Match 43.7%; Score 834; DB 21; Length 335;
Best Local Similarity 53.3%; Pred. No. 1,7e-59;
Matches 179; Conservative 47; Mismatches 96; Indels 14; Gaps 7;

QY 45 ILINGKVLKDESTLEENKVEDGLVVMLSKGRKTS--GSTGSSSQHSNTPATRQAP 101
DB 1 MLIHQGVNLKDETLLENNVENSFIYIMLSKTKASFGASTASAPASATQPTVATPQ 60
QY 102 LEAD-QQAPQPPVAPITTSOPEGLPAQAPNTHDNAASNLGSRVDTIINOIMEGGGSW 160
DB 61 VSAFTASVPVSTGSTATAAAPATAASVQTDVYQGAASNLVAGTLESTVQOILDMGGGSW 120
QY 161 DKDVQALRAAYNNPRAVYILSGIPVTAET-----AVIGGOGAN--TTDRAPGSEA 213
DB 121 DRDTVVALRLRAFNPPRAVYILSGIPQAQEIPPVQAQAPRTGQAANPLAOPQAAAPA 180
QY 214 GLSGIPTAPLDFLPQGSASNAGGAGGGLDFLRNPNFOFVAREVHTNPQILOPMLVEL 273
DB 181 AATGCPNANPLNLPQGMRAADAGAGCNLDPLRNSQOFALIRAVQANPQILOPMLQEL 240
QY 274 SKQNPQILRLILENNHDEFLQLNPFEGEGDFLDQPEDEMPHAISVTPREOEAGRLLE 333
DB 241 GKQNPQVRLIQEHOADFLRLINEPVE-GEENVMEQLLEA-AMPQAVTYTPPEREAIEELE 298
QY 334 SMGDFRARVITAFIACDRNELANYLEHAGE-ED 368
DB 299 GMGDFRAMVLEVPFACNKNRELANYLELDMHHEFED 334

RESULT 12

AAG44343
ID AAG44343 standard; Protein; 296 AA.

AC AAG44343;

DT 18-OCT-2000 (first entry)

DE Arabidopsis thaliana protein fragment SEQ ID NO: 55533.

KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.

XX Arabidopsis thaliana.

XX EPI033405-A2.

XX 06-SEP-2000.

XX 25-FEB-2000; 2000EP-0301439.

XX 25-FEB-1999; 99US-0121825.
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Query Match 42.9%; Score 820; DB 21; Length 296;
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Matches 176; Conservative 40; Mismatches 74; Indels 12; Gaps 8;

QY 73 MLSKGTSGTSSGSSO-HSNTPATRQAPLEAPQAPQPVAPITTSQP-EGLPAGQAN 130
DB 1 MLSKRTASSAGSPSTPTSTSTSTTLAP-STTOSIAPVPSNSTPVOEPTAOSD 59
QY 131 TDNNAASNLISGRNVDITINQLEMGGSGMDKYORALRAAYNNPERAVEYLYSGIPYT 190
DB 60 TYGQAASTLVSGSSIEQWQOIMEMGSGMDKETVTRALRAAYNNPERAVDYLYSGIPET 119
QY 191 AET-AVPIGQGANNTTDRAPTEGAGLISGTPNTAPLUDLFPOGASNAGGAGGPPDLFLRNN 249
DB 120 VTIPTATNLGSGVSGRELTPAPPP---SGGPNSSPLDLFPQEAIVSDAAGDGLTLEFLRGN 175
QY 250 PFOAVREWHNTPOITLOMLVELSKONPOILRIEENHDEFLOLNEFEEGEG--DTL 307
DB 176 DDFQOLRSWVNSPQILQMLQELGKONPOLRLQENQAEFLQLNEFYBESDDVDVF 235
QY 308 DQPEDEMPHAISVTPPEOEAIGRLESMGFDRAVIEAFIACDRNEELANYLEHAGE- 366
DB 236 DQPDQ-EMPHSVNTPPEBESIERLEAMGFRAIYIEARLSCDRNEELANYLEHSADE 294
QY 367 ED 368
DB 295 ED 296
RESULT 13
AAG1976
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XX AAG1976;
AC AAG1976;
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XX 17-OCT-2000 (first entry)
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DE Arabidopsis thaliana protein fragment SEQ ID NO: 21983.
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XX Protein identification; signal transduction pathway; metabolic pathway;
KM hybridisation assay; genetic mapping; gene expression control; promoter;
KM termination sequence.
XX
OS Arabidopsis thaliana.
PN EP1033405-A2.
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PD 06-SEP-2000.
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PE 25-FEB-2000; 2000EP-030139.
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PR 18-AUG-1999; 99US-0149426.
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PR 23-AUG-1999; 99US-0149902.
PR 23-AUG-1999; 99US-0149930.
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PR 26-AUG-1999; 99US-0150884.
PR 27-AUG-1999; 99US-0151065.
PR 27-AUG-1999; 99US-0151066.
PR 27-AUG-1999; 99US-0151080.

PR	30-AUG-1999;	99US-0151303.
PR	31-AUG-1999;	99US-0151438.
PR	01-SEP-1999;	99US-0151930.
PR	07-SEP-1999;	99US-0152363.
PR	10-SEP-1999;	99US-0153070.
PR	13-SEP-1999;	99US-0153758.
PR	15-SEP-1999;	99US-0154018.
PR	16-SEP-1999;	99US-0154039.
PR	20-SEP-1999;	99US-0154779.
PR	22-SEP-1999;	99US-0155139.
PR	23-SEP-1999;	99US-0155486.
PR	24-SEP-1999;	99US-0155659.
PR	28-SEP-1999;	99US-0156458.
PR	29-SEP-1999;	99US-0156586.
PR	04-OCT-1999;	99US-0157117.
PR	05-OCT-1999;	99US-0157573.
PR	06-OCT-1999;	99US-0157865.
PR	07-OCT-1999;	99US-0158029.
PR	08-OCT-1999;	99US-0158232.
PR	12-OCT-1999;	99US-0158359.
PR	13-OCT-1999;	99US-0159293.
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PR	14-OCT-1999;	99US-0159331.
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PR	18-OCT-1999;	99US-0159584.
PR	21-OCT-1999;	99US-0160741.
PR	21-OCT-1999;	99US-0160767.
PR	21-OCT-1999;	99US-0160758.
PR	21-OCT-1999;	99US-0160770.
PR	21-OCT-1999;	99US-0160814.
PR	21-OCT-1999;	99US-0160815.
PR	22-OCT-1999;	99US-0160980.
PR	22-OCT-1999;	99US-0160981.
PR	22-OCT-1999;	99US-0160989.
PR	25-OCT-1999;	99US-0161404.
PR	25-OCT-1999;	99US-0161405.
PR	25-OCT-1999;	99US-0161406.
PR	26-OCT-1999;	99US-0161359.
PR	26-OCT-1999;	99US-0161360.
PR	26-OCT-1999;	99US-0161361.
PR	28-OCT-1999;	99US-0161920.
PR	28-OCT-1999;	99US-0161922.
PR	28-OCT-1999;	99US-0161993.
PR	29-OCT-1999;	99US-0162142.

	Query Match	38.88;	Score 742;	DB 21;	Length 307;
	Best Local Similarity	52.33;	Pred. No. 4.5e-52;		
	Matches 161;	Conservative 42;	Missed 91;	Indels 14;	Gaps
QY	73	MLSGKRTS---GNYGTSSSHQSNMPTARQAPPLPAP-QQAPQPPVATITTSQPEGLPQAQ	128		
Db	1	MLSTKASPSGASASTASAPAPAPAPATQPVATQVSAPAPASVPVPSGTATAAAPTAAAVQ	60		
QY	129	PNTIDNANSLNLSGRNDITIIINQLEMGGSGMDKDKQALRAAYNNPERAVEYLSGIP	188		
Db	61	TDVYGGAAASNLVACTITLESTYQQLIDMGSGMDYVYRALRAAFNNPERAVEYLSGIP	1220		
QY	189	VTAEL-----AVPIGGCGAN--TTDRAPYTGAGLSGIPNTAPLDLFPQGASNAGGAGG	241		
Db	121	AQAEILPVAQAAPATGEOQANPLAQPOQAAAPAAATGPGPNMPLNLFQPGMAPDAGAGAG	180		
QY	242	PLDLELRNNPQQAQVRENVHTNPQLLOPALVELSKQNPQILRLIEENHDEFLQLINPEFG	301		
Db	181	NLDLELRNSQOQALRAVQAQNPQILQPMLOELGKQNPQLVRLIQHQADEFLRLINEPEV-	239		
QY	302	GGEGFLQPPEDDEKPHALISVTPREGQALIGRLSESGFDPRAVIENFLACDRNEELAAAYLL	361		
Db	240	GEENVMDLEL-ANPQAQVTVIPEREKLEIRLEGGFPRAVMLLEFFCAKNNEELAAAYLL	298		

QY	362	EHAGE-ED	368
	:	1	1
	:	1	1
Db	299	DHMHFED	306
RESULT 14			
ID	AA645206	AA645206 standard; Protein, 307 AA.	
XX	AA645206;		
XX	18-OCT-2000	(first entry)	
DE	Arabidopsis thaliana protein fragment SEQ ID NO: 56725.		
XX			
KW	Protein identification; signal transduction pathway; metabolic pathway; hydridsation assay; genetic mapping; gene expression control; promoter termination sequence.		
XX	Arabidopsis thaliana.		
PN	EPI03405-A2.		
XX			
PD	06-SEP-2000.		
XX			
PF	25-FEB-2000; 2000EP-0301439.		
XX			
PR	25-FEB-1999;	99US-0121825.	
PR	05-MAR-1999;	99US-0123180.	
PR	09-MAR-1999;	99US-0123548.	
PR	23-MAR-1999;	99US-0125788.	
PR	25-MAR-1999;	99US-0126264.	
PR	29-MAR-1999;	99US-0126785.	
PR	01-APR-1999;	99US-0127462.	
PR	06-APR-1999;	99US-0128234.	
PR	08-APR-1999;	99US-0128714.	
PR	16-APR-1999;	99US-0129845.	
PR	19-APR-1999;	99US-0130077.	
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PR	30-APR-1999;	99US-0132048.	
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PR	05-MAY-1999;	99US-0132484.	
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PR	14-MAY-1999;	99US-0134370.	
PR	18-MAY-1999;	99US-0134768.	
PR	19-MAY-1999;	99US-0134941.	
PR	20-MAY-1999;	99US-0135124.	
PR	21-MAY-1999;	99US-0135353.	
PR	24-MAY-1999;	99US-0135629.	
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PR	27-MAY-1999;	99US-0136392.	
PR	28-MAY-1999;	99US-0136782.	
PR	01-JUN-1999;	99US-0137222.	
PR	03-JUN-1999;	99US-0137528.	
PR	04-JUN-1999;	99US-0137502.	
PR	07-JUN-1999;	99US-0137724.	
PR	08-JUN-1999;	99US-0138094.	
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PR 18-JUN-1999; 99US-0139458.
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PR 18-JUN-1999; 99US-0139460.
PR 18-JUN-1999; 99US-0139461.
PR 18-JUN-1999; 99US-0139462.
PR 18-JUN-1999; 99US-0139463.
PR 18-JUN-1999; 99US-0139750.
PR 18-JUN-1999; 99US-0139763.
PR 21-JUN-1999; 99US-0139817.
PR 22-JUN-1999; 99US-0139899.
PR 23-JUN-1999; 99US-0140353.
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PR 24-JUN-1999; 99US-0140695.
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PR 29-JUN-1999; 99US-0140991.
PR 30-JUN-1999; 99US-0141287.
PR 01-JUL-1999; 99US-0141842.
PR 01-JUL-1999; 99US-0142154.
PR 02-JUL-1999; 99US-0142055.
PR 06-JUL-1999; 99US-0142390.
PR 08-JUL-1999; 99US-0142803.
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PR 23-JUL-1999; 99US-0145145.
PR 23-JUL-1999; 99US-0145218.
PR 23-JUL-1999; 99US-0145224.
PR 26-JUL-1999; 99US-0145276.
PR 27-JUL-1999; 99US-0145913.
PR 27-JUL-1999; 99US-0145918.
PR 27-JUL-1999; 99US-0145919.
PR 28-JUL-1999; 99US-0145951.
PR 02-AUG-1999; 99US-0146386.
PR 02-AUG-1999; 99US-0146388.
PR 03-AUG-1999; 99US-0146389.
PR 03-AUG-1999; 99US-0147038.
PR 04-AUG-1999; 99US-0147204.
PR 04-AUG-1999; 99US-0147302.
PR 05-AUG-1999; 99US-0147192.
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PR 25-AUG-1999; 99US-0150566.
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PR 27-AUG-1999; 99US-0151080.
PR 30-AUG-1999; 99US-0151303.
PR 31-AUG-1999; 99US-0151303.
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PR 15-SEP-1999; 99US-0154018.
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PR 28-OCT-1999; 99US-0161993.
PR 29-OCT-1999; 99US-0162142.

Query Match 38.8%; Score 742; DB 21; Length 307;
Best Local Similarity 52.3%; Pred. No. 4,5e-52;
Matches 161; Conservative 42; Mismatches 91; Indels 14; Gaps 7;

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OY 129 PNTHDNAASNLISGRANDTIINQLEMGGGSGWCKDKQRLRAAYNNPERAVEYLYSGIP 188
Db 61 TDYVGOASNLVAGTTTLESTVVOQILDMGGGSDWDRTVVRALRAAFNNPERAVEYLYSGIP 120

